

ABSTRACT OF THE DISCLOSURE

5 A semiconductor laser device has an active layer which is divided into two regions in the direction of a resonator, i.e., a light-amplifying region and a saturable absorber region. The light-amplifying region and the saturable absorber region are produced to allow the semiconductor laser device to be in a bistable state. For the light-amplifying region and the saturable absorber region respectively, p-electrodes are separately and independently formed. N-electrodes are provided in relation to the p-electrodes. From one of the p-electrodes, a current which is modulated with
10 noise added thereto is injected.